

PATENT COOPERATION TREATY

JH

10 JUN 2005

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

PCT

WRITTEN OPINION
(PCT Rule 66)

To:

VENNER, SHIPLEY & CO.
20 Little Britain
London EC1A 7DH
GRANDE BRETAGNE

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15.12.2003

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08.01.2003

International Patent Classification (IPC) or both national classification and IPC
G07F3/00

Applicant
MONEY CONTROLS LIMITED et al.

1. This written opinion is the **first** drawn up by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application
3. The applicant is hereby **invited to reply** to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 08.05.2005

Name and mailing address of the international preliminary examining authority:



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Kemény, M

Formalities officer (incl. extension of time limits)
Atienza Vivancos, B
Telephone No. +49 89 2399-7891



I. Basis of the opinion

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed"*):

Description, Pages

1-14 as originally filed

Claims, Numbers

1-26 as originally filed

Drawings, Sheets

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

6. Additional observations, if necessary:

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	3-13,16-26
Inventive step (IS)	Claims	1-26
Industrial applicability (IA)	Claims	

2. Citations and explanations**see separate sheet**

1 Summary

The application does not meet the requirements of Article 33(1) PCT, as claims 1, 2, 14 and 15 are not new within the meaning of Article 33(2) PCT, and the other claims are not inventive within the meaning of Article 33(3) PCT.

2 Prior Art

Reference may be made to the following documents:

- D1: EP-A-0 480 736 (MARS INC) 15 April 1992 (1992-04-15)
- D2: US-A-4 538 719 (GRAY MATTHEW H ET AL) 3 September 1985 (1985-09-03)
- D3: US-A-5 255 344 (HAYASHI ISAO ET AL) 19 October 1993 (1993-10-19)
- D4: BUCKLEY J J ET AL: "HYBRID NEURAL NETS CAN BE FUZZY CONTROLLERS AND FUZZY EXPERT E SYSTEMS" FUZZY SETS AND SYSTEMS, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 60, no. 2, 10 December 1993 (1993-12-10), pages 135-142, XP000405982 ISSN: 0165-0114
- D5: US 2001/009485 A1 (FURUYA YONEZO) 26 July 2001 (2001-07-26)
- D6: US-A-5 355 989 (BEST JOCHEN) 18 October 1994 (1994-10-18)

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

3 Novelty

3.1 Independent Claim 1

Document D1 discloses:

- 1) A method of accepting of money items ("A method of operating a money validation apparatus", claim 1), comprising
- 2) generating individual money items signals with a value that is a function of the respective items of money under test (implicit, as the output of any (e.g. magnetic) sensing means is a (e.g. electrical) signal, which therefore has been transformed);

- 3) developing for each of the money items under test, a transformed money item signal as a function of the value of the money item signal and at least one variable parameter that is a function of an acceptability criterion for the money item under test ("converting the sensed data into a plurality of data points", claim 1);
- 4) making a comparison of the values of the transformed money item signals with a window limit value ("comparing the data point of the item to the cluster", claim 1); and
- 5) accepting each money item in dependence upon said comparison ("accepting the item of the first type if its data point matches one of the data points within the cluster", claim 1).

Therefore, all features of claim 1 are known from D1, the claim being not new within the meaning of Article 33(2) PCT. The requirement of Article 33(1) PCT are not met.

3.2 Dependent Claim 2

Claim 1 of document D1 essentially discloses:

- 1) the reading of the characteristics of genuine money items and storing the data, thus learning what the "proper" characteristics are, and then
- 2) testing money items to be tested by comparing the sensed characteristics of the items to be tested to the data previously stored.

This is the additional subject-matter of claim 2 of the present application, which therefore is considered not new, either.

3.3 Independent Claim 14 and Dependent Claim 15

The same reasoning as under points 3.1 and 3.2 applies, *mutatis mutandis*, to the subject-matter of the corresponding independent claim 14 and dependent claim 15, which therefore are also considered not new.

4 Inventive Step

4.1 Dependent Claims 3 and 16

The difference between claim 3 and D1, which is considered to be the closest prior art, is that the decision making system is a rule based expert system.

The plausible technical problem for the person skilled in the art to be solved is how to implement the transformation of the signal.

Documents D3 and D4 describe rules based expert systems. Both documents were published almost 10 years before the priority date of the present application. Therefore, their contents are part of the knowledge of the person skilled in the art of implementing a decision making system. Implementing a rule based expert system is a normal thing a person skilled in the art of implementing decision making systems, in particular since the advantages of such a rules based expert system can be clearly overseen in advance.

Therefore, the person skilled in the art would implement a rules based expert system for the above plausible technical problem. As a consequence, both claims 3 and 16 do not comprise an inventive step within the meaning of Article 33(3) PCT, due to which the requirements of Article 33(1) PCT are not met.

4.2. Other Dependent Claims

The features of the other dependent claims, insofar as they are not known from the documents cited in the Search Report for the same purpose as in the present application, are generally known to a person skilled in the art, and therefore, do not produce an inventive step.

Re Item VIII

Certain observations on the international application

5 Clarity

Claims 3 and 16 refer to a rules based expert system. It is however not clear what exactly a rules based expert system actually is. If this rules based expert system is no more than what is specified in the claims following claims 3 and 16, the Applicant is kindly invited to consider deleting these two claims in order for the application to comply with Article 6 PCT.